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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,565	03/28/2007	Philippe Joliot	129511	1640
25944	7590	08/31/2009		
OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850			EXAMINER DOAN, TRANG T	
			ART UNIT	PAPER NUMBER
			2431	
			MAIL DATE	DELIVERY MODE
			08/31/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,565	Applicant(s) JOLIOT, PHILIPPE	
	Examiner TRANG DOAN	Art Unit 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on 05/11/2009.
2. Claims 1-3 have amended.
3. Claims 1-8 are pending for consideration.

Response to Arguments

4. Applicant's argument with respect to the 35 U.S.C. 112 2nd paragraph rejection has been fully considered in view of the amendment filed 05/11/2009, which has been made in record, and the 35 U.S.C. 112 2nd paragraph rejection has been withdrawn.
5. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reitmeier et al. (US Publication 2002/0003881) (hereinafter Reitmeier) in view of Neuman et al (2002/0162026) (hereinafter Neuman)

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8. Regarding claim 1, Reitmeier discloses the sending element downloads a symmetrical fragmentation-transmission secret key from a database listing the authorized sending elements (Reitmeier: paragraph 0018: the index table may be distributed using a different medium); the sending element transmits the symmetrical fragmentation-transmission secret key to the receiving element via a second-level relay (Reitmeier: paragraph 0018: the encrypted index table is downloaded to the receiver from an on-online server); the second-level relay informs the database that the symmetrical fragmentation-transmission key is being used (Reitmeier: paragraph 0031); the receiving element transmits to the sending element an authorization to send fragments via the second-level relay (Reitmeier: paragraph 0041); the sending element fragments data in an initial file, according to an incremental distribution before assignment by swapping, such that the data of each fragment is unintelligible, the level and the type of fragmentation being predefined in the symmetrical fragmentation-transmission secret key (Reitmeier: paragraphs 0037 and 0041); the sending element assigns each fragment an addressing path through a network of first-level relays (paragraphs 0054 and 0056); the sending element transmits each fragment to the receiving element via the first-level relays (Reitmeier: paragraph 0054); the receiving element reassembles the fragments received, according to the instructions in the symmetrical fragmentation-transmission secret key, to recreate the initial data file (Reitmeier: paragraphs 0037 and 0041); the receiving element sends an acknowledgement of receipt and of checking of the reassembly of the initial file to the database via the second-level relay (Reitmeier: paragraph 0043); and the symmetrical

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fragmentation-transmission secret key is deleted from the database (Reitmeier: paragraph 0030).

Reitmeier does not disclose wherein a size and content of the symmetrical fragmentation-transmission secret key is dependent on a size of the telecommunication or radiocommunication networks. However, Neuman discloses wherein a size and content of the symmetrical fragmentation-transmission secret key is dependent on a size of the telecommunication or radiocommunication networks (Neuman: paragraph 0011: the optimal size for a key is dependant on the user's network). Therefore, it would have been obvious to a person skilled art at the time the invention was made to have included in Reitmeier the feature of Neuman as discussed above because what is needed is a single system to that can handle security threats from both outside and inside a network, that is easily configurable on a user basis, and that doesn't use computational resources of the client machines (Neuman: paragraph 0010).

9. Regarding claim 2, Reitmeier as modified discloses wherein there are defined several different classes for defining the initial information object to be transmitted, namely: a class T of fragmentation types of the bit-by-bit, byte-by-byte, byte block-by-byte block, bit block-by-bit block, space-by-space type, and therefore all possible instances for each of the abovementioned types (Reitmeier: paragraphs 0023-0027); a fragmentation level class F, F being a real integer at least equal to two determined when choosing the fragmentation level (Reitmeier: paragraphs 0023-0027); a network size class R, R being a real integer at least equal to one, and preferably greater than or

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equal to two, determined when choosing the size of the network architecture (Reitmeier: paragraphs 0023-0027); a class A of IP addresses of the relays of the network architecture of the types of IP addresses of the so-called first-level relays, IP addresses of the so-called second-level relays, with all possible instances (Reitmeier: paragraphs 0023-0027).

10. Regarding claim 3, Reitmeier as modified discloses wherein the symmetrical fragmentation-transmission secret key comprises two subkeys, namely: a fragmentation-reassembly subkey, unique to each initial data file to be transmitted, and for which the counting possibilities are derived from the factorial computation, comprising the instructions needed for the deletion of the initial data file and the distribution by swapping in a set of fragments (Reitmeier: paragraph 0019); a sending subkey, unique to each initial data file to be transmitted, and for which the counting possibilities are derived from the exponential computation, comprising the instructions needed, such as the IP addresses of the first-level relays, for routing the fragments within the network of first-level relays (Reitmeier: paragraphs 0054-0057).

11. Regarding claim 4, Reitmeier as modified discloses wherein the receiving element addresses a request to the first-level relays, the IP address of which is contained in the sending subkey, to download the fragments (Reitmeier: paragraph 0023).

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12. Regarding claim 5, Reitmeier as modified discloses wherein each of the first-level relays is provided with management means for recognizing incoming fragments, intelligent sorting and forwarding the same fragments to their recipient (Reitmeier: paragraph 0031).

13. Regarding claim 6, Reitmeier as modified discloses wherein the second-level relay is not linked to the network of first-level relays (Reitmeier: paragraph 0056).

14. Regarding claim 7, Reitmeier as modified discloses wherein the network of first-level relays is dependent on the second-level relay for the definition of readdressing tasks (Reitmeier: paragraph 0056).

15. Regarding claim 8, Reitmeier as modified discloses wherein a first-level relay or second-level relay is replaced by three in-line relays, the intermediate relay of which is an IP address linked to the other two relays via a non-Internet connection (Reitmeier: paragraph 0054-0056).

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRANG DOAN whose telephone number is (571)272-0740. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Trang Doan/
Examiner, Art Unit 2431

/Christopher A. Revak/
Primary Examiner, Art Unit 2431